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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/605,201	06/27/2000	David Black	E0295/7146	4782
7590 02/03/2004		EXAMINER		
Matthew B Lowrie c/o Wolf Greenfield & Sacks PC 600 Atlantic Avenue Boston, MA 02210-2211			PEYTON, TAMMARA R	
			ART UNIT	PAPER NUMBER
			2182	a
	•		DATE MAILED: 02/03/2004	

Please find below and/or attached an Office communication concerning this application or proceeding.

	··	Application No.	Applicant(s)	\not		
Offic Action Summary				!		
		09/605,201	BLACK, DAVID			
	one Action Cummary	Examiner	Art Unit ,			
	The MAILING DATE of this communication app	Tammara R Peyton	2182			
Period fo		rears on the cover sheet with the C	rrespondence address			
THE N - Exter after - If the - If NO - Failui - Any r	ORTENED STATUTORY PERIOD FOR REPLY MAILING DATE OF THIS COMMUNICATION. Is sions of time may be available under the provisions of 37 CFR 1.13 SIX (6) MONTHS from the mailing date of this communication. period for reply specified above is less than thirty (30) days, a reply period for reply is specified above, the maximum statutory period verse to reply within the set or extended period for reply will, by statute eply received by the Office later than three months after the mailing department adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tim within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from cause the application to become ABANDONEI	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
1)🖾	Responsive to communication(s) filed on 28 N	November 2003 .				
2a)□		is action is non-final.				
3)□	Since this application is in condition for allowa		osecution as to the merits is			
, —	closed in accordance with the practice under					
· <u> </u>	on of Claims					
,	Claim(s) <u>1-30</u> is/are pending in the application					
	4a) Of the above claim(s) is/are withdray	vn from consideration.				
·	5) Claim(s) is/are allowed.					
·	Claim(s) <u>1-6,15,16,20,23-25 and 30</u> is/are rejections.					
·	Claim(s) 7-14,17-19,21,22 and 26-29 is/are ob					
•	Claim(s) are subject to restriction and/or on Papers	r election requirement.				
	The specification is objected to by the Examine	r.				
,	Γhe drawing(s) filed on is/are: a)□ accep		miner.			
,	Applicant may not request that any objection to the	•				
11) 🔲 🗆	The proposed drawing correction filed on					
	If approved, corrected drawings are required in rep	bly to this Office action.				
12) 🗌 🗆	The oath or declaration is objected to by the Ex	aminer.				
Priority u	nder 35 U.S.C. §§ 119 and 120		·			
13)	Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a))-(d) or (f).			
a)[☐ All b)☐ Some * c)☐ None of:					
	1. Certified copies of the priority documents have been received.					
	2. Certified copies of the priority documents have been received in Application No					
•	3. Copies of the certified copies of the prior application from the International Buree the attached detailed Office action for a list	reau (PCT Rule 17.2(a)).	,			
14)∐ A	cknowledgment is made of a claim for domestic	c priority under 35 U.S.C. § 119(e	e) (to a provisional application).			
) ☐ The translation of the foreign language pro Acknowledgment is made of a claim for domesti					
Attachment	c(s)					
2) Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s) <u>7</u>	5) 🔲 Notice of Informal F	(PTO-413) Paper No(s) Patent Application (PTO-152)			
.S. Patent and Tr	ademark Office					

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

- 1. Claim 16 is rejected under 35 U.S.C. 102(e) as being anticipated by *Sunkara et al.* (US 6,523,032).
- 2. As per claim 16, Sunkara teaches a host comprising:
 - a processing unit; and

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a memory interface module to permit accesses by the host computer (client) to a logical entity to be made to one a first physical storage location for a read requests (Slave database server, 103, 104, or 105) and to a different second physical storage location for a write requests (Master database server, 102), to prevent accesses by the host computer to the logical entity from being made to the second physical storage location for the read requests (reads are done by Slave databases, not Master database), and the prevent accesses by the host computer to the logical entity from being made to the first physical storage location for write requests (Slave database server, 103/107, 104/107, or 105/107), wherein the first and second physical storage locations are different. (Abstract, col. 4, lines 9-col. 6, lines 1-60)

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 3. Claims 1-6, 20, 23, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Sunkara et al.* (US 6,523,032) and *Sigal et al.*, (US 5,881,292)

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4. As per claims 1-6, 15, 20, 23-25, and 30, *Sunkara* a method of moving a logical entity from a first storage element to a second storage element, the logical entity being capable of being accessed by a plurality of host computers, the method comprising steps of:

creating a copy of the logical entity on the second storage element (Master database server, 102);

moving all reads of the logical entity from each of the host computers to the second storage element; and

after the step of moving all reads, moving all writes to the logical entity to the second storage element. (Abstract, col. 4, lines 9-col. 6, lines 1-60)

- 5. Sunkara teaches a system including a master database server for servicing both read and write operations and a slave database server for servicing only read-only access to a user application. In order to prevent a consistency problem all updates are sent to the master database. However, Sunkara is silent in respect to ensuring that all reads to the master database server are completed before current updates (writes) are performed.
- 6. Sigal teaches a method of moving a logical entity (module version) from a first storage element (slave module) to a second storage element (master module), the logical entity being capable of being accessed by a plurality of host computers (User1,

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closed.

User2, or User3, Fig.5b). Sigal teaches creating a copy of the logical entity to a slave module that is accessible by User1, User2, or User3 and moving all reads (read-on copy) of the logical entity (module version) received from User1, User2, or User3 and then moving all the writes (updates) to the master module. Sigal teaches a system that allows read-only access of a logical entity to be opened by each of the host computers via a slave module. The write updates to the logical entity are sent to the master module but are not processed right away. Sigal teaches that a 'write' to the master module is only allowed after the last slave module is closed, thereby ensuring that all current 'reads' to the master module are performed before an update to the master module is allowed. All 'writes' to the master module are prevented until the last slave module is

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7. It would have been obvious to one of ordinary skill at the time the invention was made to implement *Sigal's* method that ensures separate moving of all reads for a logical entity are performed before write updates are moved to the master database with *Sunkara's* system, because doing so would improve the maintaining of current version applications for each of multiple users without any performance impact. (*Sigal*, col. 2, lines 1-46 and col. 11, lines 17-37)

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All wabl Subject Matter

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Claims 7-14, 17-19, 21, 22, and 26-29 are objected to as being dependent upon a rejected base claim, but would be allowable if added to the rejected independent

claim.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tammara Peyton whose telephone number is (703) 306-5508. The examiner can normally be reached between 6:30 - 4:00 from Monday to Thursday, (I am off every first Friday), and 6:30-3:00 every second Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Gaffin, can be reached on (703) 308-3301. The fax phone number for the organization where this application or proceeding is assigned is (703) 305-3718. Any inquiry of a general nature of relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

Mailed responses to this action should be sent to:

Commissioner of Patents and Trademarks

Washington, D.C. 20231

Faxes for Official/formal (After Final) communications or for informal or draft communications (please label "PROPOSED" or "DRAFT") sent to:

(703) 872-9306

Hand-delivered responses should be brought to:

USTPO, 2011 South Clark Place, Customer Window Crystal Plaza Two, Lobby Room 1B03, Arlington, VA, 22202 Crystal Park II, 2121.

Tammara Peyton

January 29, 2004